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PRIMARY CARE PHYSICIAN PRACTICES IN THE DIAGNOSIS, TREATMENT AND MANAGEMENT OF MEN WITH CHRONIC PROSTATITIS/CHRONIC PELVIC PAIN SYNDROME

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Abstract

Objective—To describe self-reported practice patterns of PCPs for the diagnosis, treatment, and management of men with CP/CPPS.

Methods—556 PCPs in Boston, Chicago, and Los Angeles were presented a vignette, which described a man with typical CP/CPPS symptoms, followed by questions about CP/CPPS.

Results—The response rate was 52%. Only 62 percent of respondents reported ever seeing a patient like the one described in the vignette. Fully 16% of respondents were “not at all” familiar with CP/CPPS, and 48% were “not at all” familiar with the NIH classification scheme for prostatitis. PCPs reported practice patterns regarding diagnosis and treatment of CP/CPPS, which are not supported by evidence.

Conclusions—Although studies suggest that CP/CPPS is common, many PCPs reported little or no familiarity, important knowledge deficits, and limited experience in managing men with this syndrome.

Keywords

chronic prostatitis; primary care physicians; survey; practice patterns

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INTRODUCTION

The term “prostatitis” is used to describe several conditions, including well-defined acute and chronic bacterial infections, poorly defined chronic pelvic pain syndrome, and asymptomatic inflammation in the prostate identified in pathology specimens. To limit confusion, the National Institutes of Health (NIH) developed a classification system and definitions for the prostatitis syndromes (1) (Table 1).

Although literature reviews provide compelling evidence that histologic prostatitis is common (2, 3), symptomatic, clinically-evident prostatitis is of greater importance to the patient and physician. The prevalence of current prostatitis-like symptoms (4, 5) or a previous physician’s diagnosis of prostatitis (6) is about 10%.

This study focuses on the predominant type of prostatitis, NIH Category III or chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS). CP/CPPS is a common(7), bothersome condition among men of all ages that impairs health-related quality of life(8, 9) and has a substantial economic impact (10, 11). The hallmark of CP/CPPS is pelvic area pain (12). The NIH Chronic Prostatitis Symptom Index (NIH-CPSI) (Figure) is a reliable, valid, self-administered index that measures symptoms of chronic prostatitis and their impact on daily life (13).

Although patients with CP/CPPS have traditionally been managed by urologists, many present first to primary care physicians with symptoms suggestive of CP/CPPS. Nonetheless, few studies (14–16) have examined what is known about primary care physicians’ practice patterns regarding CP/CPPS. To ascertain the knowledge, attitudes, and beliefs of primary care physicians about the diagnosis and treatment of CP/CPPS, we conducted a multi-center survey of primary care physicians in 2006.

METHODS

Study Sample

There was a convenience sample of 556 practicing primary care physicians who were eligible for the study at the participating institutions (Massachusetts General Hospital (MGH), Brigham and Women’s Hospital (BWH), University of California Los Angeles (UCLA), and Access Community Health Network (Access)). Access, located in Chicago, is the largest federally qualified health center organization in the United States. Lists of affiliated primary care physicians were obtained from the participating institutions, and these lists were refined using information provided by the General Medicine Divisions and the hospital directories to exclude physicians without direct patient care, residents and fellows, and those seeing only pediatric patients. A current interoffice mailing address was obtained for each physician.

Study Design

The Institutional Review Board of each institution approved the study and survey. Brief (<15 minutes), self-administered, pre-tested questionnaires were mailed to 556 physicians at the 3 institutions. The mailing included a cover letter from the Principal Investigator, a fact

sheet describing the study, a \$5 coffee gift card, and a pre-stamped, pre-addressed return envelope. About 2 weeks after the initial mailing, all physicians were mailed a brief 1-page thank you/reminder letter. Nonrespondents were sent a second complete packet about 3 weeks after the initial mailing. No further attempts to contact nonrespondents were made. Voluntary completion and return of the survey implied informed consent.

Questionnaire Development

A literature review identified 3 survey studies of primary care physicians regarding CP/CPPS as a starting point in questionnaire development (14–16). Across the study sites of Boston, Chicago, and Los Angeles, we conducted a series of 5 primary care physician focus groups and subsequently drafted a preliminary questionnaire. The draft questionnaire was modified after several cognitive interviews with primary care physicians across the 3 study sites. The modified questionnaire was then pre-tested (with primary care physicians as well as a panel of 5 experts in CP/CPPS from North America) and refined following the debriefing. The finalized questionnaire (**Appendix**) included 5 domains; familiarity and experience with CP/CPPS, diagnosis (which included referral threshold), treatment, perceptions on managing patients with CP/CPPS (which included knowledge questions), and demographics. A vignette was presented and used to “anchor” responses to questions regarding how the physicians would evaluate and treat such a patient. The vignette read as follows:

A healthy 38-year old man reports several months of nonspecific perineal pain and urinary frequency. He is in a longstanding, monogamous relationship and has no history of STDs or UTIs. His prostate examination is normal. His urinalysis is normal and his urine culture is negative.

For analytic purposes, diagnostic tests and treatment recommendations were stratified into common (at least 50% of respondents do it “more than half the time” or “almost always”) and uncommon (at least 50% obtain a test “rarely” or “never” and recommend treatment to “very few” or “none”).

Statistical Analyses

This was a descriptive, cross-sectional study, which utilized questionnaires to obtain pertinent data. The completed questionnaires were keyed into a data entry system, and double blind data entry provided 100% verification of coding and data entry. Analyses involved primarily the generation of descriptive statistics with appropriate confidence intervals. All analyses were performed at the data center (at the University of Illinois, Chicago) and utilized Statistical Package for the Social Sciences version 15 (17).

Sample size—As part of the questionnaire development process, a set of correct answers was identified related to basic knowledge about CP/CPPS, and the proportion of primary care physicians who provided correct responses was calculated for each question. A similar study evaluating practice patterns in primary care physicians for the diagnosis and treatment of benign prostatic hyperplasia (BPH) indicated that approximately one-third of these physicians followed all of the recommended guidelines (18). Because CP/CPPS is less

familiar to PCPs than BPH, we expected that a lower proportion (estimated at 25%) would demonstrate adequate knowledge. Assuming a 25% population prevalence of PCP correct responses and a 95% probability that the proportion obtained would be $\pm 5\%$ of the population value, the sample size required was calculated to be approximately 288 subjects.

Descriptives and Predictors of Primary Care Physicians' Responses—

Descriptive statistics were used for all survey responses and physician characteristics. Chi-square and ANOVA were performed to detect variation in having familiarity with the CP/CPPS condition, its symptoms, and etiology based on physician demographic characteristics. Ability to identify symptoms of CP/CPPS and its etiology were considered as knowledge questions and responses were coded as correct and incorrect. Logistic regression analysis was used to predict which characteristics of primary care physicians were associated with the likelihood of performing various tests and recommending various treatments.

RESULTS

Sample characteristics

Among the 556 primary care physicians who were mailed the questionnaire, a total of 289 (52%) responded, most of those (59%) from the initial mailing. Respondents were distributed approximately equally by gender (53% male), and the time from graduation from medical school was an average of 19 years (range 1–51). Respondent practice type was community-based (38%), hospital-based (40%), and private practice-based (22%) (Table 2).

Diagnosis of CP/CPPS

Only 62 percent (180/289) of respondents reported ever seeing a patient like the one described in the vignette. Those physicians had seen a mean of 3.2 patients like this (range 0–50) over the past 12 months, and reported a mean of 3.4 patients in their practice with a CP/CPPS diagnosis (0–30). Responders were asked, “When evaluating a patient like the one in the vignette to confirm the diagnosis, or to rule out other causes of his symptoms, how often do you do the following...”; their responses to 9 items are shown in Table 3. We found that testing for Chlamydia and gonorrhea and ordering serum creatinine were common diagnostic tests (reported being used at least more than half the time in 86% and 59%, respectively), and that obtaining pre- and post- massage urine cultures, ordering abdominal/pelvic CT scans, post void residuals, and prostate ultrasounds were all uncommon diagnostic tests (range of 61% to 70%, used rarely or never). Although testing for prostate specific antigen has not been shown to be helpful in the diagnosis of CP/CPPS(19, 20), approximately 50% of respondents reported ordering this test about half the time or more.

Treatment of CP/CPPS

Physicians were asked, “For how many of your patients like the one described in the vignette have you recommended treatment (either initial treatment or follow-up treatment) with...”; their response to the following 12 items are shown in Table 4. Antibiotics were a common treatment recommendation (72% recommending more than half the time or almost always), while prostate massage, pelvic floor physical therapy, 5- alpha reductase inhibitors, bladder analgesics, complementary/alternative therapies, narcotic pain medications,

anticonvulsants, antidepressants, and anticholinergics were all uncommon recommendations (range of 75% to 97%, treated very few or none). Despite being a common treatment recommendation, the use of antibiotics for the treatment of men with CP/CPPS is not supported by the evidence (21). Although the evidence for the use of alpha blockers is inconsistent (22), we found that 41% of respondents recommended this treatment about half the time or more. While not supported by evidence, NSAIDs are often considered an adjunctive medication and our results showed that 61% recommended anti-inflammatory medications about half the time or more.

Knowledge and Perception of Managing Patients with CP/CPPS

Fully 16% (46/289) were “not at all” familiar with CP/CPPS, and 48% (139/289) were “not at all” familiar with the NIH classification of prostatitis (1)(Table 5). Sixty five percent of respondents (188/289) correctly identified the hallmark symptom of CP/CPPS as pelvic pain. Regarding etiology, 71% (205/289) correctly indicated that the majority of cases of CP/CPPS were non-infectious; however, 37% (107/289) incorrectly indicated that it was caused by a sexually transmitted disease, and 36% (104/289) incorrectly indicated that it was caused by a psychiatric illness. (Table 5).

We also asked how frequently the PCPs manage patients with other chronic conditions that often have uncertain etiology (Table 6). While the majority of PCPs reported that they frequently manage patients with chronic low back pain, chronic headache, and irritable bowel syndrome, and almost a quarter of PCPs reported frequently managing patients with chronic fatigue syndrome, only about 5% reported frequently managing patients with CP/CPPS.

Predictors of Primary Care Physicians' Responses

Using univariate analyses, we show that there are certain physician characteristics that are significantly associated with the likelihood of (1) having familiarity with CP/CPPS in men (practice setting, male gender, more years of practice, and higher percentage of male patients); (2) having knowledge of the hallmark symptoms of CP/CPPS (male gender); and (3) having knowledge in managing patients with CP/CPPS (male gender, more years of practice, higher percentage of male patients). Table 7 presents only significant associations between physician characteristics and familiarity and knowledge questions.. In the multivariate analyses of primary care physicians' characteristics and the likelihood of performing various tests and recommending various treatments, results of the logistic regression analysis did not predict any consistent pattern in reporting various tests and recommending various treatments.

DISCUSSION

Knowledge of physician practices, including approaches to diagnosis, treatment, and management of patients is fundamental to both the development and evaluation of continuing medical education, medical school curricula, and national educational programs. The emerging recognition of CP/CPPS as an important medical condition was the impetus

for us to survey the diagnostic, treatment, and management patterns of primary care physicians in the United States.

Our study showed that many PCPs reported little or no familiarity with CP/CPPS, have important knowledge deficits, and have limited experience in managing men with this syndrome. Over one-third of PCPs reported never having seen a patient like the one with CP/CPPS described in the vignette. PCPs reported practice patterns regarding diagnosis and treatment of CP/CPPS, which are not supported by evidence, such as ordering prostate-specific antigen tests and prescribing antibiotics. In order to effectively diagnose and treat CP/CPPS, physicians need to understand the NIH classification system for prostatitis; however, PCPs reported little or no familiarity with this classification scheme.

Two previous survey studies done 10 and 15 years ago, respectively, were from Canada (16) and the Netherlands. The only study done in the United States, done 10 years ago, was from one county in the state of Wisconsin (15). Previous studies did not specifically ask primary care physicians about chronic prostatitis/chronic pelvic pain syndrome, but instead referred to “prostatitis” in general. We were particularly interested in surveying physicians about new cases of CP/CPPS, as this is an important current research area. It is unclear whether the management of men with newly diagnosed CP/CPPS should vary from men with longstanding, treatment refractory CP/CPPS. Unlike the previous studies, we used a clinical vignette to be certain that primary care physicians were aware that our questions pertained to men with a specific type of prostatitis, namely CP/CPPS.

While studies suggest that the symptoms of CP/CPPS are common in the community(11, 23), and that 1% of all visits to primary care physicians are for the diagnosis “prostatitis” (24), our data indicated that fully 38% (110/289) of PCPs reported never having seen a patient like the one with CP/CPPS described in the vignette. In addition, 16% (46/289) reported being “not at all” familiar with the condition, CP/CPPS. Furthermore, PCPs in our study reported infrequently managing men with CP/CPPS; they reported more frequently managing other chronic pain conditions, such as chronic headache, chronic fatigue syndrome, irritable bowel syndrome, and interstitial cystitis, which do not appear to have correspondingly higher population-based prevalence than CP/CPPS. Whether these findings represent a large pool of men with CP/CPPS who do not seek care or seek care directly from urologists, or whether men who visit primary care physicians may not volunteer their CP/CPPS symptoms or PCPs may not feel comfortable discussing them cannot be determined from our survey. It is also possible that CPPS is less common than we think, as most visits for “prostatitis” identified in studies such as the National Ambulatory Medical Care Survey studies(24) may not reflect CP/CPPS. Lastly, it could be that our sample of PCPs for this study may not be truly representative of PCPs in the community.

Responding physicians also reported varying practice patterns regarding diagnosis, referral, and treatment, and reported important knowledge deficits. Approximately half of the physicians in our survey study were “not at all” familiar with the classification of prostatitis, which is a fundamental tenet to caring for men with CP/CPPS, and should be a key feature of any educational outreach efforts to PCPs. Our finding that almost one-third of primary care physicians did not correctly respond that the etiology of CP/CPPS is non-infectious,

coupled with the finding that antibiotics were (inappropriately) the most common prescribed therapy, also suggest an essential need to educate PCPs. Acute and chronic bacterial prostatitis, which are infectious diseases, need to be differentiated from chronic prostatitis/chronic pelvic pain syndrome, which likely does not have an infectious etiology. In addition, approximately one-third of primary care physicians incorrectly reported that CP/CPPS is caused by psychiatric illness. Improved education of PCPs about CP/CPPS may help change this potentially damaging perception that the chronic pelvic pain in men is psychogenic. Finally, there is a potential for harm (i.e., unnecessary anxiety, prostate biopsies) to men with symptoms suggestive of CP/CPPS by the inappropriate ordering of PSA tests, which our study showed was a common practice, yet there is no evidence to support this practice(19, 20).

Understandably a big challenge to managing men with CP/CPPS remains the fact that there is neither a gold standard diagnostic test nor proven effective treatment (25); therefore, there lacks an evidence-based clinical guideline to help primary care physicians in the management of this condition. Meanwhile, ongoing clinical trials funded by the NIDDK seek to identify new and effective treatments for men with CP/CPPS (www.uppcrn.org). Research is also underway to elucidate the natural history, etiology, and pathophysiology of this condition, such that early identification and intervention in primary care may result in improved outcomes for patients.

Another reason for educating primary care patients about CP/CPPS is that this condition is among those that cause chronic nonmalignant pain, an important new topic in primary care medicine (26). Since most primary care physicians are not comfortable treating patients with chronic nonmalignant pain, educational efforts are underway to increase PCPs' willingness to manage patients with chronic pain. Educational efforts about chronic pelvic pain syndrome in men could serve as a useful model of a chronic nonmalignant pain condition, during medical training, including medical school, residency, fellowship, and continuing medical education courses.

Our study has several limitations. First, although our response rate of 52% is typical of physician surveys(27), response bias is a possibility. Secondly, our study population was chosen by convenience sampling, therefore, our findings warrant replication in a larger, more representative sample. Thirdly, the data on the practice patterns of PCPs were based on physician self-report and may not match actual practice. Fourthly, the associations between the physician characteristics and management practices must be viewed with caution, given that multiple tests of association were performed.

In conclusion, the results of this multi-center, primary care physician survey study suggest that educational efforts on the care of patients with CP/CPPS should target PCPs, especially since pain is now considered the hallmark symptom of this syndrome and diagnosis, treatment, and management of chronic nonmalignant pain in primary care practice has become a national health care priority.

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The NIH Chronic Prostatitis Symptom Index (13).

<u>Pain or Discomfort</u> 1. In the last week, have you experienced any pain or discomfort in the following areas?		Yes	No
a. Area between rectum and testicles (perineum)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀	
b. Testicles	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀	
c. Tip of the penis (not related to urination)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀	
d. Below your waist, in your pubic or bladder area	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀	
2. In the last week, have you experienced:			
a. Pain or burning during urination?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀	
b. Pain or discomfort during or after sexual climax (ejaculation)?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀	
3. How often have you had pain or discomfort in any of these areas over the last week?			
<input type="checkbox"/> ₀ Never			
<input type="checkbox"/> ₁ Rarely			
<input type="checkbox"/> ₂ Sometimes			
<input type="checkbox"/> ₃ Often			
<input type="checkbox"/> ₄ Usually			
<input type="checkbox"/> ₅ Always			
4. Which number best describes your AVERAGE pain or discomfort on the days that you had it, over the last week?			
<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆	<input type="checkbox"/> ₇
<input type="checkbox"/> ₈	<input type="checkbox"/> ₉	<input type="checkbox"/> ₁₀	
NO PAIN		PAIN AS BAD AS YOU CAN IMAGINE	
<u>Urination</u> 5. How often have you had a sensation of not emptying your bladder completely after you finished urinating, over the last week?			
<input type="checkbox"/> ₀ Not at all			
<input type="checkbox"/> ₁ Less than 1 time in 5			
<input type="checkbox"/> ₂ Less than half the time			
<input type="checkbox"/> ₃ About half the time			
<input type="checkbox"/> ₄ More than half the time			
<input type="checkbox"/> ₅ Almost always			
6. How often have you had to urinate again less than two hours after you finished urinating, over the last week?			
<input type="checkbox"/> ₀ Not at all			
<input type="checkbox"/> ₁ Less than 1 time in 5			
<input type="checkbox"/> ₂ Less than half the time			
<input type="checkbox"/> ₃ About half the time			
<input type="checkbox"/> ₄ More than half the time			
<input type="checkbox"/> ₅ Almost always			
<u>Impact of Symptoms</u> 7. How much have your symptoms kept you from doing the kinds of things you would usually do, over the last week?			
<input type="checkbox"/> ₀ None			
<input type="checkbox"/> ₁ Only a little			
<input type="checkbox"/> ₂ Some			
<input type="checkbox"/> ₃ A lot			
8. How much did you think about your symptoms, over the last week?			
<input type="checkbox"/> ₀ None			
<input type="checkbox"/> ₁ Only a little			
<input type="checkbox"/> ₂ Some			
<input type="checkbox"/> ₃ A lot			
<u>Quality of Life</u> 9. If you were to spend the rest of your life with your symptoms just the way they have been during the last week, how would you feel about that?			
<input type="checkbox"/> ₀ Delighted			
<input type="checkbox"/> ₁ Pleased			
<input type="checkbox"/> ₂ Mostly satisfied			
<input type="checkbox"/> ₃ Mixed (about equally satisfied and dissatisfied)			
<input type="checkbox"/> ₄ Mostly dissatisfied			
<input type="checkbox"/> ₅ Unhappy			
<input type="checkbox"/> ₆ Terrible			
<hr/> <u>Scoring the NIH-Chronic Prostatitis Symptom Index Domains</u> Pain: Total of items 1a, 1b, 1c, 1d, 2a, 2b, 3, and 4 = ____ Urinary Symptoms: Total of items 5 and 6 = ____ Quality of Life Impact: Total of items 7, 8 and 9 = ____			

Figure.
The NIH Chronic Prostatitis Symptom Index (13).

Table 1

Categories of the Prostatitis Syndromes, According to the NIH Classification System(20).

Category	Symptoms
I. Acute bacterial prostatitis	Associated with severe symptoms of prostatitis, systemic infection, and acute bacterial urinary tract infection
II. Chronic bacterial prostatitis	Caused by chronic bacterial infection of the prostate with or without symptoms of prostatitis and usually with recurrent urinary tract infections caused by the same bacterial strain
III. Chronic pelvic pain syndrome [*]	Characterized by symptoms of chronic pelvic pain and possibly symptoms on voiding in the absence of urinary tract infection
IV. Asymptomatic inflammatory prostatitis	Characterized by evidence of inflammation of the prostate in the absence of genitourinary tract symptoms; an incidental finding during evaluation for other conditions, such as infertility or elevated serum prostate-specific antigen levels

^{*} This category is subdivided into inflammatory (category IIIA) and noninflammatory (Category B) prostatitis.

Table 2

Characteristics of the Responding Physicians (n= 289)

Characteristic	
Years since graduation from medical school (mean, SD)	18.9 ± 10.8
Percentage of professional time devoted to clinical practice (mean %)	72.8 %
Practice setting	
Community-based	37.7 %
Hospital-based	39.9 %
Office-based/Private practice	22.3 %
Percent of patients that are male (mean, SD)	37.8 ± 31.9
Gender	
Male	53.1 %
Female	46.9 %
Race/ethnicity	
Hispanic or Latino	5.5 %
White	64.9 %
Black or African American	5.9 %
Asian	22.5 %
American Indian or Alaska Native	0.4 %
Native Hawaiian or Pacific Islander	0.7 %

Table 3

Reported Frequency of Primary Care Physicians' Performing Diagnostic Tests in the Evaluation of a Patient with Symptoms Suggestive of CP/CPPS* (n= 180).

I refer to a specialist at this point	
Almost always	9.3 %
More than half the time	15.7 %
About half the time	16.3 %
Less than half the time	19.8 %
Rarely	29.7 %
Never	9.3 %
I obtain testing for Chlamydia and gonorrhea	
Almost always	70.6 %
More than half the time	15.6 %
About half the time	5.0 %
Less than half the time	6.1 %
Rarely	1.7 %
Never	1.1 %
I order post void residual	
Almost always	4.5 %
More than half the time	6.8 %
About half the time	6.2 %
Less than half the time	17.5 %
Rarely	33.9 %
Never	31.1 %
I order serum creatinine	
Almost always	39.9 %
More than half the time	19.1 %
About half the time	9.6 %
Less than half the time	8.4 %
Rarely	15.7 %
Never	7.3 %
I order abdominal/pelvic CT scan	
Almost always	4.0 %
More than half the time	6.2 %
About half the time	9.6 %
Less than half the time	10.7 %
Rarely	47.5 %
Never	22.0 %
I obtain pre- and post- prostate massage urine cultures	
Almost always	12.4 %

More than half the time	10.7 %
About half the time	7.3 %
Less than half the time	8.5 %
Rarely	27.1 %
Never	33.9 %

I order serum prostate specific antigen test

Almost always	21.7 %
More than half the time	18.9 %
About half the time	8.6 %
Less than half the time	9.1 %
Rarely	21.1 %
Never	20.6 %

I order a prostate ultrasound

Almost always	2.3 %
More than half the time	5.7 %
About half the time	10.3 %
Less than half the time	14.3 %
Rarely	33.7 %
Never	33.7 %

Perform any other procedure

Yes	5 %
No	95 %

*
Chronic Prostatitis/Chronic Pelvic Pain Syndrome

Table 4

Reported Frequency of Primary Care Physicians' Treatment Recommendations for a Patient with Symptoms Suggestive of CP/CPPS* (n= 180)

Antibiotics	
Almost all	36.5 %
More than half	35.4 %
About half	11.2 %
Less than half	7.3 %
Very few	4.5 %
None	5.1 %
Alpha blockers	
Almost all	2.3 %
More than half	19.4 %
About half	19.4 %
Less than half	13.7 %
Very few	21.1
None	24.0
Anti-inflammatory medications	
Almost all	16.5 %
More than half	29.5 %
About half	15.3 %
Less than half	9.7 %
Very few	15.3 %
None	13.6 %
Anti-depressant medications	
Almost all	0.6 %
More than half	2.3 %
About half	8.5 %
Less than half	14.1 %
Very few	32.2 %
None	42.4 %
Anticholinergics (e.g., oxybutynin)	
Almost all	0.6 %
More than half	4.0 %
About half	5.1 %
Less than half	15.3 %
Very few	34.5 %
None	40.7 %
Anticonvulsants (e.g., neurontin)	
About half	1.7 %

Less than half	2.8 %
Very few	29.5 %
None	65.9 %
<hr/>	
Narcotic pain medications	
About half	0.6 %
Less than half	2.3 %
Very few	21.1 %
None	76.0 %
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Complementary/alternative medicine therapies	
Almost all	1.1 %
More than half	1.7 %
About half	2.8 %
Less than half	10.2 %
Very few	26.1 %
None	58.0 %
<hr/>	
Bladder analgesics (e.g., pyridium)	
Almost all	1.7 %
More than half	2.8 %
About half	5.6 %
Less than half	11.3 %
Very few	25.4 %
None	53.1 %
<hr/>	
5 Alpha Reductase Inhibitors	
Almost all	0.6 %
More than half	0.6 %
About half	6.3 %
Less than half	6.3 %
Very few	18.9 %
None	67.4 %
<hr/>	
Pelvic floor physical therapy	
More than half	2.3 %
About half	2.3 %
Less than half	4.5 %
Very few	20.5 %
None	70.5 %
<hr/>	
Prostate massage	
More than half	1.7 %
About half	2.8 %
Less than half	2.8 %
Very few	16.5 %

None	76.1 %
<hr/>	
Other	
Yes	4.5 %
No	95.5 %
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* Chronic Prostatitis/Chronic Pelvic Pain Syndrome

Table 5

Physician Knowledge and Perception of Managing Patients with CP/CPPS* (n=289)

Number of male patients that carry the diagnosis (mean, SD)	3.39 ± 5.159
Familiarity with the condition of chronic prostatitis/chronic pelvic pain syndrome in men	
Very familiar	6.6 %
Somewhat familiar	45.6 %
A little bit familiar	31.4 %
Not at all familiar	16.4 %
The "hallmark" symptom of chronic prostatitis/chronic pelvic pain syndrome	
Pelvic Area Pain (correct answer)	64.4 %
Urinary Frequency	13.8 %
Nocturia	1.1 %
Other	2.7 %
I do not know	18.0 %
Familiarity with the NIH classification of prostatitis	
Very familiar	2.2 %
Somewhat familiar	16.4 %
A little bit familiar	33.5 %
Not at all familiar	48.0 %
The majority of cases of chronic prostatitis/chronic pelvic pain syndrome in men are Non-infectious (correct answer)	
Strongly disagree	1.5 %
Disagree	15.2 %
Agree	44.6 %
Strongly agree	26.8 %
I don't know	11.9 %
Caused by sexually transmitted diseases (incorrect answer)	
Strongly disagree	14.7 %
Disagree	48.5 %
Agree	20.3 %
Strongly agree	3.8 %
I don't know	12.8 %
Caused by psychiatric illness (incorrect answer)	
Strongly disagree	15.5 %
Disagree	49.1 %
Agree	14.3 %
Strongly agree	1.5 %
I don't know	19.6 %

* Chronic Prostatitis/Chronic Pelvic Pain Syndrome

Table 6

Reported Frequency of Primary Care Physicians' Managing Chronic Conditions (n=289)

Chronic headache	
Frequently	77.4 %
Sometimes	21.5 %
Never	1.1 %
Chronic low back pain	
Frequently	92.6 %
Sometimes	7.0 %
Never	0.4 %
Chronic fatigue syndrome	
Frequently	23.9 %
Sometimes	67.2 %
Never	9.0 %
Chronic prostatitis/chronic pelvic pain syndrome	
Frequently	5.6 %
Sometimes	71.3 %
Never	23.1 %
Interstitial cystitis/painful bladder syndrome	
Frequently	7.1 %
Sometimes	75.8 %
Never	17.1 %
Irritable bowel syndrome	
Frequently	61.3 %
Sometimes	38.3 %
Never	0.4 %

Table 7

Physician characteristics that significantly predict familiarity and knowledge with CP/CPPS* and etiology and symptoms

	Statistic			p-value
Physician characteristics that significantly predict familiarity with CP/CPPS in men				
Practice setting	X ² = 8.67	df= 2	n=268	0.013
Gender	X ² =38.61	df=3	n=270	0.000
Years of practice	F=4.26	df=3	n=267	0.006
Percent of patients that are male	F=12.43	df=3	n=266	0.000
Physician characteristics that significantly predict knowledge of hallmark symptom of CP/CPPS				
Gender	X ² = 6.63	df= 1	n=259	0.01
Physician characteristics that predict knowledge about managing patients with CP/CPPS				
CP/CPPS is non-infectious				
Years of practice	T=-2.00	df=158.4	n=265	0.046
Percent of patients that are male	T=-2.27	df= 262	n=264	0.024
CP/CPPS is caused by STD				
Gender	X ² =6.48	df=1	n=264	0.011
Percent of patients that are male	T=-2.74	df=259	n=261	0.007

* Chronic Prostatitis/Chronic Pelvic Pain Syndrome